



OTVARC Oscillator

The Oregon Tualatin Valley Amateur Radio Club Newsletter

May 1995 Issue

The Prez Sez

Bill - N7VZF

Hurray, Hurray for the First of May...

It must be spring, I actually went fishing on Sunday after opening day. Had a great time watching my son on his first adventure as a "Licensed Angler". It brought to mind the wonderful experience of sharing the experience when a newly "Licensed Ham" makes the first contact. Try it, I think you will like it.

Speaking of new hams. As most of you know by now, this year your board has decided that instead of awarding a scholarship, the club would use the proceeds from Sea-Pac in a different way. The club is in the process of obtaining educational material such as licensing manuals, books pertaining to ham radio and the like. These materials will be presented to both the Washington County School District and to the Washington County Library System. The study guides and publications will be placed in the intermediate schools in the area. Each publication will include a dedication on the inside from OTVARC that supplies the club address and an expiration date. The board felt that this type of investment reaches a much wider audience and will benefit both the students and the amateur radio hobby more than the scholarships. I would like to thank Burt Rooke for the work he has done to research the project and make the recommendations. Kudos Burt.

On a different but related subject: Field Day is rapidly approaching. Field Day was designed as a multi-purpose event. It give hams the opportunity to test their skills in operating away from their "regular" haunts by taking to the field. It is also an opportunity to present our hobby to the public through publicity of the event and involvement with the community through things like offering to send traffic for anyone who would like. See Carl Clawson - WS7L's article in this issue. Carl needs help in the planning and operations. If you would like to help - read the column and give him a call.

Don't forget the upcoming Public Service Events. There is an article by VP-Janet in this issue that list some of the activities in the local area. Give it a look.

Not much else for this month. The "Silly Season" has started with parades, runs, rallies and field days. Enough to keep everyone and anyone busy and happy.

Catch you all at the next meeting. 73 de Bill

...From the Second Seat Janet Bell, WB7FJC, v.p.

FUTURE TENSE:

The May program will be Brien Morris, N7UMJ, from the Oregon Trail Chapter of the American Red Cross. He will bring the mobile Chapter on Wheels (the "COW"). This will be your opportunity to see what Red Cross communications can be had in an emergency, and how you may be able to help.

For June we will be highlighting "Field Day." We hope to have some slides from previous "Days" and planning and training for the one coming up. Carl Clawson will spearhead it.

In July we hope to have Russ Fillingner, talking about the DX Bureau, what it is, how it can help you, how you can help it.

August will finally see the Westside Light Rail presentation on communications inside the tunnel, etc.

September we will talk about the country's second largest communications network, Civil Air Patrol. We will talk about the air-to-ground live broadcast of damage assessment (over the amateur radio band); disaster relief, air searches, and the leadership training available for teenagers. On hand will be N7RFA, 1Lt Ron Kirkpatrick, Deputy Director of Oregon Wing Communications, and some cadets from the Washington County Squadron located in Hillsboro.

Other ideas we are pursuing are the MARS program with Peter Thunem; possibly Mark Walker, W7CLU, talking about "Stuff you can build"; Mary Lou Brown with updates about new happenings in Amateur Radio from the ARRL; a Tailgate Swapmeet; and other ideas you may submit. Please, call me with any other ideas you may be interested in exploring-**648-4147 evenings or 648-8821 days.**

We are very thankful to Virginia Thompson (KA7HCK) who brought us an some great slides and tape on **Life Flight** and how communications are achieved with the chopper crews. She also had some very good advice for how to approach the "birds" --always from the sides and front, never from the back; and only to approach when signalled to by the crew.

Thanks to all those who helped bring the audio/visual equipment, set it up, and take it down for the program - (And also the lights...Neil).

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Minutes of Board Meeting 4-5-95

1. Meeting called to order at 7:02 pm by President Bill Merwin
2. Those in attendance were Bill Merwin, Janet Bell, Lorna Campbell, Bob Cowan, Betty Mickey, Brad Beach, Burt Rooke, Alan Chinnock, Neil McKie, Al Berg, and Chuck Mickley.
3. Moved and seconded to approve the minutes of the February Board Meeting. Approved.
4. Treasurers Report - Distributed to board.
5. Membership - Bill Merwin and Alan Chinnock to work out design for the membership data base. Bill Had a good response with the OTVARC flyers at ICOM Days at HRO.
6. SEAPAC - Flea market is full. All is going well.
7. Field Day - Neil McKie volunteered his property for field day. Chuck Mickley to follow up with Carl Clawson.
8. Directors Liability Insurance - Bob Cowan reported that it would cost between \$500 and \$1500 to cover the whole board. The club bylaws would need a hold harmless clause. It is possible that the individual board members are covered under their personal home owners policy. Tabled while board members check on their own insurance.
9. New Business
Moved and seconded to pay \$274 for the one-time setup charge for the club logo embroidery.
Chuck Mickley will fill out and mail the club license application.
10. Moved and second for adjournment at 8:52 pm. Passed.

Respectfully submitted,
Alan R. Chinnock
Secretary

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From the Secretary Alan Chinnock KB7POR

This month I think I will get bold and discuss two topics in one article. I will try to make it easy for you by covering them one at a time, rather than alternating sentences. The two topics are 1) SEAPAC, and 2) Projects.

SEAPAC; a large gathering of hams held annually at Seaside. SEAPAC committee; a group of people from OTVARC who put in many hours making SEAPAC happen. OTVARC members; the people who benefit from SEAPAC. Why these bullet statements you say? "I already know that". True, but this is not the whole story.

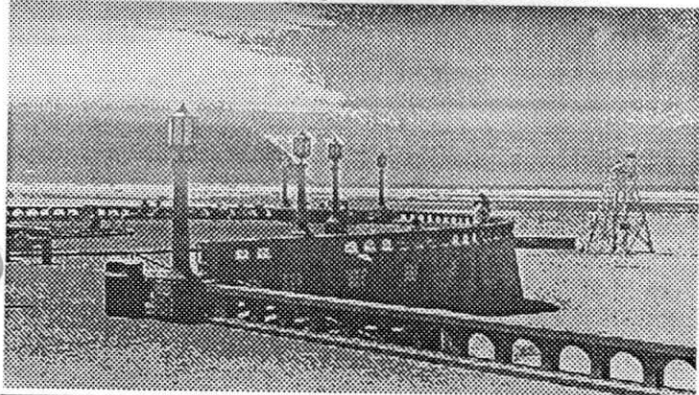
SEAPAC currently operates in the black with the proceeds benefitting OTVARC and the community. In the community we promote awareness of Amateur Radio, support classes for new hams, provide emergency and public service communications, and the list goes on. In the club we are able to buy equipment to make the club run smoothly, like typewriters and video projectors. OK so you already knew that, too.

On to the point. The SEAPAC committee needs some help. Since we, the members of OTVARC, receive the benefits of SEAPAC shouldn't we offer to help? One of the services offered to the exhibitors at SEAPAC is security. This requires a little help from a lot of people. You can easily be one of these people. For two hours you can walk around the show keeping an eye on things. You bring your 2m handheld (or borrow one) and you get a security arm band. You also get a chance in a drawing for a new radio, a drawing just for security people.

Please call Frank Boyle KB7OMB at 663-3131. He is organizing the shifts for the security activities.

Now the second topic. Projects. As you may remember from last month I think building stuff is fun. Apparently so do a number of you. In the last month I have received several suggestions for things we could get together and build. They are QRP transmitter, antennas & attenuators for bunny hunting, an audio AGC for your DSP (or other uses, like the kid's stereo), Anderson connectors, long tone zero decoder, and a window antenna mount.

If you look in the Oscillator, however, you will notice that there is no one listed for Project Night. I would dearly love to help out with this, but I have a slight problem. I am in the middle of moving and I can't do much with construction projects. Would someone or someones like to help out, or will we have to wait until Alan gets moved and settled.



These People Need Your Help!

Bradley-Angle House
P.O. Box 14694
Portland, Oregon 97214
Call **281-3540**

This shelter for domestic violence victims is in desperate need of the following things.

Remember, your gifts are tax-deductible donations.

For the Emergency Shelter**

- * Bath towels and blankets
- * Infant Formula - all types
- * Twin Bed Linens
- * Computers - IBM or Apple
- * Diapers - medium and large
- * Electronic Thermometer with disposable plastic sheaths
- * First Aid supplies
- * Polaroid film
- * Alarm Clocks
- * Non-English Books, especially Spanish, Russian and Asian

For the Outreach Program

(Support Groups)

- * Arts and Crafts Supplies
- * Blank White T-Shirts
- * Fimo Clay

For the Children's Program**

- * Folding Strollers
- * Baby Backpack Carriers
- * Full Size Cribs
- * Underwear and socks
- * Videotapes (non-violent)
- * Toys for Toddlers

For Women in Transition**

- * Appointment Books
- * Household Cleaning Supplies
- * Umbrellas
- * New Pantyhose (all sizes)
- * Gift Certificates for Hardware or Department Stores (may specify no alcohol or tobacco.)

For the Administrative Office

- * Desktop Copier
- * Fax Machine
- * Selectric III typewriter

****Washington County** also has shelters which will need about the same things. Don't forget them. Call them at **640-5352** to offer help.

RadioActive Schools - Part 2

We work with the teacher to pick the three modules that seem right for their class. In the Worldwide Radio module, the students visit the van where their experience HF radio contacts, VHF/UHF repeater demonstrations (the van houses a UHF repeater), and the "Field" end of Amateur TV which we pick up in the classroom modules. Needless to say, video is very popular with students. The van module is always one of the three. We regularly select the Introduction module, sometimes combined with the Computer module, using GeoClock(tm) for an indoor module. For younger students (fifth year and down), we usually run the Code module. For this, all ten students in the group get their own code practice oscillator and we talk about the origins of Morse code and they learn some letters, probably their name. For older students, we use the satellite or packet radio modules. We have a satellite station in the van with KC Tracker(t). Although actual contacts are pretty rare, we find the students fascinated by the tracking programs and the colorful graphics of the InstantTrack(t) program.

As you might have guessed by now, a Radio Day requires a minimum of 4 volunteers. This is the limiting factor and why we only conduct about 1 per month. Still, the program has been very well received. The only thing we ask of a school is that a single teacher serve as our point of contact for the event, that they show "New World of Amateur Radio" or another tape we provide, and that they take a roll of pictures for us. This has never been a problem! To date, over 2200 students have participated in Radio Day in the past three school years. This may not seem like a lot in a greater Atlanta metro area of over 300,000 students, but hey - it's better than the alternative. I tell the team members when we go out for the day that if we only change the lives of 2 or 3 kids, we will have had a successful day.

Second, the **RadioActive Schools** program is teachers getting their licenses. We have always worked hard to enroll teachers in our radio classes of which we teach one or two a year. Some teachers enroll after we conduct a Radio Day for them. This was true for Jan Waring, an LD teacher at Roswell North. Others attend the classes first. Martha Clark, KD4KEY, is such a teacher. Martha was invited to attend a class by another teacher. She came to the first class to see what "ham radio" was all about. Her friend decided not to take the class, but Martha stuck in and earned her Tech Plus. She has been awarded multiple grants for using amateur radio in her classroom and with a call like hers, you can see why she teaches Morse code and has progressed to General herself.

Third, **RadioActive Schools** is mentors working with teachers to teach some electrical principles or to conduct or assist the teacher in conducting full classes. Phil, K4PQC, is such a person. Phil always tries to take the time to spend a day with a teacher who needs help, especially with Packet Radio. Mark, KJ4YM, is another who has spend countless hours helping a teacher with a class. Bill, KM4LS, has for years taught classes and helped Barbara Edwards, KC4PBB, at the Renfro Middle School with the classes there. Other active mentors include Hal, K4JHM, John, WB4HLZ, and Randy, K4ODL. Tom, AC4CL, the mentor for the Lamar County

school has even had to regroup the teaching staff there to keep ham radio going. When Martha, KD4API, left for Virginia with her husband, Tom found two new teachers, Rhonda Toon, now KD4YKD and Amanda Brinkley, now KD4YKH, to train in his home until they received their licenses and now are now packet **RadioActive!** In fact, counting Jimmy, N4LYS, and the students from Cass Middle School, we now have four schools that are active in packet radio. This includes Martha, KD4KEY and Barbara, KC4PBB.

Fourth, **RadioActive Schools** is support for a school radio station and club. We have worked with teachers to obtain grants, hold fund raisers, and seek donations of equipment. We also have a good supply of loaner equipment for use by the schools. This is not "Junk", but rather equipment that clubs have funded or obtained through donations. We really recommended this approach for a club. Here is how it works. A teacher is loaned equipment to set up a station at the school. As long as the station is active at the school, the teacher uses the equipment as if it were his/hers. If the program terminates for any reason such as the teacher moving to another location outside the area supported by the sponsoring club, then the equipment reverts to the club for reassignment elsewhere. Some schools have bought equipment for the teacher to use and then found it gathering dust when the teacher moves away, an unfortunate situation all around. Loaned equipment is insured by the club and the school takes reasonable means to provide for its security.

Results - Our stated objectives have ben to expose students to science and technology and along the way if some of them achieve their ham license and some of them actually get the "bug" that is great. We feel that these 2200 students and many more who have been part of ongoing programs will be a little better for our having tried. In the end isn't that what's important - we tried!! All the volunteers who have helped have felt that they are part of the solution and not part of the problem.

There are many, many more folks who have given of their time to schools in the area and I wish I could have mentioned them all. Two particular now come to mind. Delaine McCarthy, KM4FV, and Connie Tudor, KM4TD, were in a class of mine about 7 years ago. Both have come back to help in numerous classes and in the case of Delaine, has even taught classes. Delaine has also run the very successful ARRL Volunteer Examination program in Roswell (north Atlanta) for several years now and dozens of students have passed their test at her sessions. It is students like Connie and Delaine who make all the effort worthwhile. Carolyn Caldwell, Martha Tanner, Jan Waring, and Martha Clark emerged out of these classes and have taken radio to their schools. Now when we go to their classrooms and a student gets a glimmer in their eye and says "Oh, now I see!" - we know we are on the right track.

"LIFE IS A ONE-WAY STREET. No matter how many detours you take, none of them leads back. And once you know and accept that, life becomes much simpler. Because then you know you must do the best you can with what you have and what you are and what you have become." -Isabel Moore

News From All Over

COME SEE THE PRETTY HAM STATION!

Just a reminder to OTVARC members, that the Amateur Radio Station at the Washington County Emergency Operations Center is alive and well. The equipment includes HF, 2 Meter voice, and 2 Meter Packet, and is easily operated. If you would like to drop by and see it, with an eye to maybe responding there if the need arises, give us a call to set up an appointment, or drop by if you are at the Courthouse on other business. Our mailing address is 150 N. First Avenue, Hillsboro, 97124. Call 648-8821 for more information.

What can I do with a 2-m All-Mode?

Back in 1993 some of the members were asking the same question after a meeting one night. We had met on 2 meter SSB several times but there didn't seem to be much activity. We kept talking about starting some kind of net to generate interest in this branch of the hobby.

Finally, I decided to quit talking and start doing. Late in 1993, I started what we call the "Monday Night No-Name Net". It started out small with 4 check-ins the first week, 7 the second week and 11 the third week. The number has grown since to a high of 21 check-ins over an evening. There are several members of the club including KB7POR (Alan), N7SNT (Ed) and me - N7VZF, who are semi-regular check ins to the net. New to join our ranks is Jim - KB7ADH.

The format is pretty simple. The net control station calls for stations who wish to check in to the net. Once we have 4 or 5, each station is given the chance to give a brief overview of what he or she has been up lately. When we have gone through the list, we ask for more stations. It goes this way several times and then we just open up the net to general discussion of things like equipment, antennas, horizontal vs vertical polarization, DX openings, projects, etc. that is usually a good source of information.

We have had stations from all over check into the net including a station from up near Seattle the other night. Not bad for 2 meter. Our regular list of stations include those from Long View in the north to Lyons in the south; Sandy to the east and Forest Grove to the west.

If you are interested in joining our expanding group of 2 meter SSB stations, all you need is a 2 meter all-mode radio capable of accessing 144.240 USB and be available on Monday nights at 2100 (PT). Lately the net control has been KB7SJE - Rick but you never know who might be welcoming you to the net.

Give it a try. As one of us on the net usually says during the net - Use it or Lose it. Utilize the spectrum. SSB is alive and well on 2 meters.

2 Meter SSB Net

When: Monday's - 2100 (PT) (9:00PM)
Where: 144.240 USB

Hope to see you there - de N7VZF

Volunteer Opportunities

Special Olympics needs coaches for events all year long. It provides year-round physical, social and psychological development through sports for mentally retarded individuals. Call 230-1146 for Multnomah County, and 649-9167 for Washington County information.

Nature Conservancy is organizing a variety of outdoor work parties at their 51 preserves throughout the state. Volunteers can help protect the lands, water and animals by gathering native seed, setting out new plantings, removing exotic species (weeds), etc. Some of the preserves provide for overnight workparties with camping, cookouts, and educational hikes. Much fun for all. Families are welcome so bring your children. Call 228-9561.

COME ONE! COME ALL!

Hams are needed to provide communications for the following activities:

NIKE RUN

May 20, the NIKE Run benefitting MADD--Mothers Against Drunk Driving. Call Ben Johnson N7OGM to sign up. You are needed between 7:30 a.m. to 1300. This event is called "Charlie's Run" named for Charlene Davis who was killed by a drunken driver in July of 1993. The TERAC van will be there and hams from all the clubs are invited to come and share the fun! Respond via email, phone, or packet if you wish to volunteer, use CEDAR K7IQI node BBS. email address is bentonj@tv.tv.tek.com. or call 649-2469 or 627-3026.

New hams, this is your chance to get involved!

Randy Stimson, KZ7T, needs folks to help with the MS Border to Border Run.

Hoodview Club needs help with Security at SeaPac. See "Secretary's Column" for contact point. You get a free chance on a handheld for each 2-hour shift you work.

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O.P.E.N. - Oregon Packet Experimenters Network

The purposes and goals of O.P.E.N. are:

To establish, promote and develop the digital radio networks in Oregon.

The focus is on packet operation above 30 Mhz, but is not limited to this mode or frequency range. The primary goal is to provide the highest quality network as can be provided given the constraints of time, sites, technology, and funding.

Work with all involved to develop a state wide plan which will guide the development of the packet network in Oregon.

Promote coordination and communication between groups and individuals involved in implementing the digital network by serving as a forum for all hams participating in or interested in digital communications in Oregon.

Identify locations in which network resources are needed, and work with individuals or organizations to assist in the development of these resources.

Work with Packet Radio organizations in other states to develop regional network capabilities. Provide coordination between the digital network in Oregon and similar networks in other areas.

Promote active discussion and debate on technical and operational issues.

Encourage technical and operational experimentation to evaluate new products, new approaches, and new ideas in designing and operating the network.

Promote support by users of their local Packet Radio organizations.

The responsibility of O.P.E.N is to the users of the packet network, to facilitate BBS to BBS forwarding, User to BBS operations, User to User conversations, and Amateur Radio Emergency Services uses of the network.

73's From N7KEJ @ N7KEJ.OR.USA.NA
Douglas Brown

FIELD DAY 1995! Carl Clawson, WS7L

As summer gets closer, we're all thinking about FIELD DAY 1995, to be held June 24 & 25 on the property of Neil WA6KLA on Kemmer Rd. The site features several acres of field suitable for camping and RV parking on top of Cooper Mountain and commands a spectacular view of the south Tualatin Valley.

You old timers know the drill. First, though, for the benefit of all our newer hams who have not yet experienced what I consider to be the high point of Amateur Radio operating:

Field Day is an annual event sponsored by the ARRL, held on the fourth full weekend of June. Operation is from 1800 UTC (11:00 a.m. local time) Saturday to 1800 UTC Sunday. We set up stations under field conditions and for 24 hours make as many contacts as possible. This sharpens our skills at setting up and communicating under conditions typical of an emergency situation—we're outside, and away from our 110V power, workshops, and antenna farms. And it's fun. Everyone from toddlers on up has a great time.

Many people choose to arrive on the afternoon or evening of Friday (the 23rd this year) to have a relaxing camp-out before the event starts.

OTVARC's emergency communications trailer is the centerpiece of our operation. It is wired for 12V battery power and has a crank-up tower that supports a beam antenna as well as supporting the center points of 40 and 80-m dipoles or inverted vees. It is equipped with a transceiver for all-band HF operation. For the Novice/Tech station OTVARC has a beam that mounts on a guyed extension ladder as well as dipoles for 40 and 80.

Field Day serves also as a friendly way to get a taste of HF contest operation. I recommend it especially to newer licensees who have not yet had the opportunity to work HF. Remember, even those without HF privileges can participate, as we will have appropriate control operators on duty at all times. We will have three HF stations on the air: Phone, CW and Novice/Tech, all powered by battery. Packet, satellite, and VHF/UHF stations might also be featured.

It's also a good chance to just hang around and get to know your fellow club members, as it is a social occasion in addition to an operating event.

Now the usual stuff. We need:

Call signs. The club needs one Extra and one Novice or Tech-Plus licensee to act as station trustees. We expect to have a club call by Field Day, but the extra will serve as a stand-by in case the club call does not come in time. As in previous years, the Novice Tech station will operate under its own call sign. These two call signs will be used by all club stations during the event. You do *not* need to remain on-site during the entire operation when acting as trustee.

Radio Stuff. In addition to OTVARC's HF rig and antennas, we need two additional 12-Volt HF transceivers with associated keyers, microphones, antenna tuners, etc. We also need one or more antennas for the CW station.

Coleman lanterns. While the trailer has 12V lights for night operation, the other stations will need these.

Tents. We will operate several stations from tents. Heavy canvas tents are preferable because of their durability, but with due care we can make use of nylon tents as well. I have one large canvas tent; at least one more will be needed.

Tables and chairs. At least three tables or desks and four to six chairs.

Control Operators. We need to have enough Extra and Novice or Tech-Plus operators on site to ensure that all three stations can operate with full privileges around the clock.

Food Czar. It's always more fun if we can have some organized feeding. Either a cookout or someone to coordinate pizza or whatever tickles your fancy. This one is wide open for someone who wants to take it on.

Feel that volunteer spirit welling up inside your heart? Give me a call! 526-4610 work, 629-5796 home. I plan to see you there June 24 & 25!

The Westside Network

It's hard to believe, but this February marked two years since packet expansion on the WestSide of Portland began in earnest. At this time two years ago, the center of WestSide packet activity was Jerry, N7PWF, in Gaston, who was running GASTON/PWFMB on 145.07. His 25 or so users were the bulk of WestSide activity, along with a handful of scattered individuals who used PDX7MB or RLIMB.

With no UHF backbone link, and connected to the rest of the network with only a tenuous path to PDX7 on his User frequency, Jerry did an excellent job of providing service to the WestSide. His sterling example of what a Sysop should be like is what inspired me to step in when a major long-term substation construction project forced him off the air with an S 5-7 noise level for months on end. Having the fortune of being able to establish a 440 Mhz backbone link with NPDX in St. Johns, and being blessed with a very good radio location, I was able to quickly build on what Jerry had started. Before long, we had spawned other Nodes and BBSs around the Tualatin Valley and its fringes. It wasn't much longer before we started building a WestSide UHF backbone network, leaving the 2 meter frequencies open to users only.

Today, we have nodes and BBSs located all around the WestSide, with a total of almost 200 Registered Users. The newest of the WestSide Sysops is Dan, N7PRC, and his DNLD Node / DNLDMB down in Donald. Beyond linking all of these nodes together on UHF, we have also established new UHF links from WestSide Network stations, to SRABBS in Salem, DXTMB in Eugene, MTHOOD on Mt. Hood, ASTMB in Astoria, and #HRS6 on Horse Rock NE of Eugene -- part of the "keyboard" network. We also have direct UHF links to WLINN in West Linn, and NPDXMB in St. Johns. Through them we have rapid links to almost any point within 150 miles of Portland. Much of this expansion in linking has been due to the donations of computers, computer parts, and funding from several of our Users.

We are currently working on upgrading these links to 9600 baud, to bring you even faster linking and other services. The connections between CEDAR, HLSB, and ALOHA are currently at 9600 baud, as is the BREEZE - WLINN connec-

tion. We are working on upgrading the CEDAR - BREEZE connection to 9600 also. Hopefully, others will soon follow.

We also have two experimental HF Gateways in operation right now.... one at HLSB, and one at ALOHA. Another HF Gateway will be coming soon through NPDX, courtesy of Mike, KG7UM. This one will be a full-fledged menu operated Gateway, similar to ALBOR. Also to come via the ALOHA node in the near future, Portland's very own Internet Gateway.

I'm also happy to say that a serious effort is underway to have an organizational meeting to begin a WestSide Packet Users Group. It is envisioned that this group will provide a forum for Users to get together to help one another, for Users and Sysops to work together in person, for being exposed to new packet software, for developing an emergency communications ability into our packet facilities, and for chances to help build the general future of the packet network on the WestSide. A group like this has long been needed. It appears that sufficient interest exists to get it started, and a search for a meeting place is going on. Watch for further announcements.

In the meantime, I ask you to do two things. 1) Many new Users have appeared in the last few weeks. Please be helpful and courteous with these new users, and do what you can to make their introduction to packet as pleasant as possible. 2) Do whatever you can to help your Sysop develop his system and improve the network. Although we have been able to come up with many radios, tnc's, antennas, and power supplies, there is never an end to the need for more to improve things. If you can donate equipment, funding, or labor to make the system work better, please contact your Sysop and do what you can. Names and addresses of all the Sysops are available by using the QTH Server at CEDAR, TIGARD, or NPDX Nodes. We all have listed telephone numbers. 3) Join and support O.P.E.N. which is working on building the Regional Packet Network.

Thanks and 73 de Ken, K7IQI, on behalf of the WestSide Network.

Packet Intro to - Continued from Page 8

should see "Test" a second time on the screen, as it's transmitted, then digipeated and sent back to you. In this case you'll only be talking to yourself via another station, but it's a good way to check to make sure your system is working properly. If that works, hit a CONTROL C. This puts you back into COMMAND mode where you talk to the TNC again. Enter D (CR). This will disconnect you from the other station, and you'll see "DISCONNECTED" on the screen.

Now you're ready to talk to someone else! Watch for a familiar call on the screen while monitoring or note calls you see frequently. Be sure to note whether or not a digipeater is being used by watching for the *. If you see WB9LOZ > WA6DDM, W6PW-1*, for example, you're receiving the packets from W6PW-1. If you do not see an asterick, you are copying the station direct. When the station you want to contact is finished with his QSO, enter:

C ---- or C ---- V ---- (depending on whether or not a digipeater is needed) followed by (CR).

You should get a "**** CONNECTED TO ..." on the screen, which means you're in converse mode, and your first QSO with someone else is underway! Anything you type now will be sent to the other station, and anything he types will be sent to you. When you're finished, be sure to do a CONTROL C to get back into command mode, then enter D to disconnect from the other station.

You're on the way now to lots of packet fun and adventure! If you are still having problems at this point, contact a friend that has some experience on packet and ask for help. The initial set up of the computer, TNC and radio is probably the biggest stumbling block in packet. Any experienced packeteer will be happy to help you get through this process to get you on the air.

INTRODUCTION TO PACKET RADIO - PART 2 - by Larry Kenney, WB9LOZ

In the first part of this series we told you, in general terms, what packet radio was all about...what it is, its uses, the equipment used and, generally, how it's transmitted. Now we're going to tell you how to get on the air, make a QSO, and become familiar with your packet station. Whether you're new to packet, having just received a new TNC, have been involved for just a short time, or are one of the "old timers" with four or five years of experience, this series should help all of you. Even if you don't yet own a TNC, you should keep this article handy for future use. I'll bet you'll be joining us soon!

The equipment needed to get on the air is a VHF transceiver, a computer or terminal, and a TNC - the terminal node controller - the little black box we talked about in part 1. (There is packet activity on HF, but VHF is where all the action is. It's the best place to start out in packet.) The TNC contains a modem and is equivalent to the modem used to connect your computer to the phone lines, except that it also contains special software that's specially designed for ham radio packet use.

When you buy a TNC and take it out of the box, you'll find cables supplied for connecting it to the radio, but you'll have to attach the appropriate mic and speaker jack connectors for the radio you're going to use. You also have to furnish the cable that connects the TNC to your computer or terminal. In most cases, the standard RS-232 port is used between the TNC and computer, however this varies with the type of computer and TNC used. The operating manuals supplied with the TNCs have a good write up on the various computers and the cabling needed. I would advise that you read the introduction and set up procedures for your particular TNC very carefully. Most companies have supplied excellent manuals, and you usually can figure out all of your set up problems from the the information supplied in the manual.

Once you have everything wired and connected together, turn on the computer, load a terminal program (anything used for a phone modem will work well for packet) and get into receive mode. Now turn on the radio and make sure the volume is turned up about a quarter turn (about the "10 or 11 o'clock" position) and make sure the squelch is set. It should be at the point where the background noise disappears, just as it would be set for a voice QSO. Next, turn on the TNC. You should get a "greeting" or sign on message showing the manufacturer's name, software version, etc. If you see a bunch of gibberish, such as &f\$&ssan>m, it means that the data rate of the TNC and computer are not the same. This data rate is better known as the baud rate. The baud rate of the TNC has to match the baud rate used by your computer terminal program and is easily adjusted. Check your TNC manual for this procedure, as it varies from TNC to TNC. If you don't see a "greeting" or the gibberish, check your cables and connections. Make sure that you have everything connected properly, that the right wires are on the right pins, etc.

Now we need to explain the three levels of communicating you can do from the keyboard. First, you can communicate with your computer for setting up the terminal

program; second, you can communicate with the TNC; and third, you can communicate with the radio. It's very important that you know which level you're in when working packet. I can't help you much with the computer level, since that varies with manufacturer, model and the terminal program you're using, but once you get the terminal program ready to receive data, you're ready to talk to the TNC.

First, do a "control C" (press the CNTL and the letter C simultaneously); this puts the TNC in COMMAND mode, the level where you communicate directly with the TNC from the keyboard. You should see "cmd:" on your screen.

Enter: MYCALL - - - -

with your callsign in place of the dashed lines, such as MYCALL WB9LOZ followed by a carriage return (CR). All commands are followed by a (CR). This sets into the TNC memory the call that you're going to use on the air. Now if you type MYCALL (CR), it should respond with your call. If it does, you've proven that the computer to TNC linkup is working fine. If you do not see anything on the screen when you type, blindly enter the following:

ECHO ON (CR). If you see two of everything that you type, such as MMYCCAALLL, enter ECHO OFF (CR).

You're now ready to go on the air! Tune the receiver to any odd numbered frequency between 144.91 and 145.09 that has some activity on it and set the rig up for simplex operation. Enter MONITOR ON (CR), then watch the screen. You should soon be seeing the packets that are being sent over the air by other stations. If you don't see anything in a minute or two, try tuning to another frequency. Watch for callsigns with a * next to it, such as W6PW-1*, WA6RDH-1*, or WB6SDS-2*. Callsigns with an asterick indicate that you're copying the packet from that station, as it's being repeated, or digipeated, by a packet repeater. Jot down the call.

In packet, you can have up to 16 different stations on the air at the same time using the same callsign. That's where the numbers in the callsign come into play. The calls W6PW, W6PW-1, W6PW-2, W6PW-3, W6PW-4 and W6PW-5 are all individual stations operating under the same station license. A callsign without a number is the same as -0. The numbers are used to differentiate between the various stations.

Now, before you try to make your first QSO with someone else, you should check out your equipment to make sure it's set up properly. To do that, you can CONNECT to yourself. Note one of the callsigns you jotted down a minute ago. Make sure your radio is still tuned to the frequency where you heard that call, then enter the following:

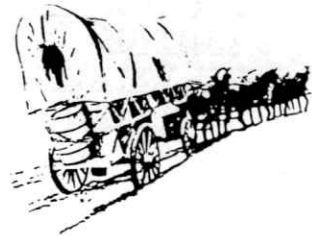
C - - - - V - - - - (CR) where the first dashed lines are YOUR callsign and the second dashed lines are the call of the station you jotted down. The C means CONNECT and the V means VIA. C WB9LOZ V W6PW-1 means connect to WB9LOZ via W6PW-1. You should soon see "**** CONNECTED TO (your call)" on the screen. You have now entered the third level of communications, called CONVERSE mode, and this is where you communicate from the keyboard to the radio. Anything you type on the keyboard will be transmitted over the air as a packet every time you hit a (CR). If you enter "Test" (CR) you

(Continued - Page 7 - Packet Intro)



OTVARC

Travelers Campout May 20-21-22



Pine Hollow

Lakeside Resort

& R.V. Park

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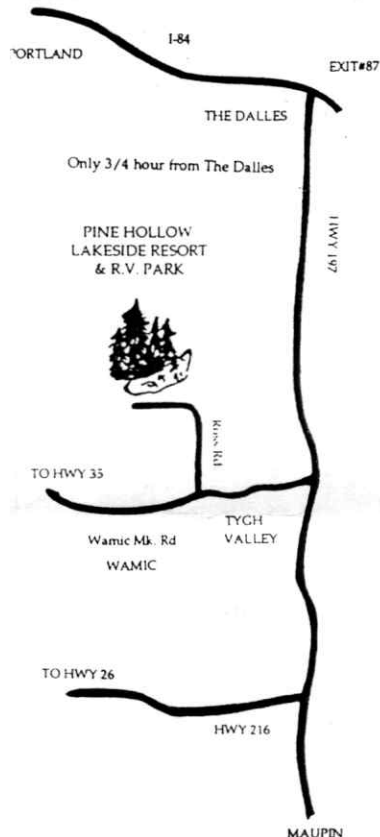
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Gas Station
Propane
Hot Showers
Boat/Motor Rentals

R.V. Sites
Marina
Snack Bar
General Store
Rest rooms
Swimming
Boat Launch

Fishing
Paddle Boats
Dump Station
Cabins
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Fish Cleaning Room
Fishing Tackle

R.V. Sites
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3rd FULL WEEKEND
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HWY SR-4
SKAMOKAWA, WA
ROGER & MARVEL NOYES

18-20 AUGUST
-OPEN-

15-17 SEPTEMBER
NACO PARK - HWY 12
RANDLE, WA
CHUCK & BETTY MICKLEY

20-22 OCTOBER
HWY 224 MILEPOST 31
ESTACADA
SILVER FOX
GENE & SALLY STICKNEY

17-19 NOVEMBER
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Rohn 55) 120ft. W/guy wires &
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& PS. (RV-4) Foot switch &
desk mic. \$275.00
Don Branda N7DDK 357-6638



SEA PAC



VE Testing

Testing will be at Our Saviour's Lutheran Church across from the Convention Center. One session only will be offered at 9:00AM on Saturday, June 3, 1995. Confirmation will be sent to participants after May 15, 1995.

Testing will be by pre-registration only. No walk-ins! Your registration must be received by May 15, 1995. Get your reservations in early - only the first 50 applicants will be accepted.

Send a completed FCC Form 610, the VE Test Application below and a check for \$5.90 made out to ARRL VEC to: Dan Sealy, AA7OA, 303 W. Niagara, Astoria, OR 97103.

Bring with you the original of your license AND a photocopy of same, one piece of photo ID (driver's license, etc.), and any CSCE's that apply AND a photocopy of each such CSCE.

For additional information call Dan Sealy evenings at (503) 338-3333.

VE Test Application

Name _____

Call _____

Address _____

City, State, Zip _____

Telephone _____

Circle all elements you are applying to take:

Novice	Tech	General	Advanced
Extra	5wpm	13wpm	20wpm

OTVARC Club Contacts

OTVARC Executive Board

President	Bill Merwin	N7VZF	644-1974
Vice President	Janet Bell	WB7FJC	648-4147
Secretary	Alan Chinnock	KB7POR	620-2057
Treasurer	Lorna Campbell	KA7RFD	591-1891
Trustee	Wes Allen	K7WWG	649-3295
Trustee	Brad Beach	N7NVC	657-1781
Trustee	Chuck Mickley	KI7CL	642-1284
Trustee	Bob Cowan	KI7QI	699-9213
Trustee	Burt Rooke	KI7JX	241-2891

Other Club Contacts

ARRL Coordinator	Bob Orr	WF7Q	297-2732
Bunny Hunting	OPEN		
Contesting	OPEN		
DX News	Rich Jones	KG7FS	645-9417
Equipment Valuation	Randy Stimson	KZ7T	297-1175
Equipment Trustee	Al Berg	WB7SIC	640-5456
Emergency Services	Tim Taylor	N7UCA	292-5430
Field Day	Carl Clawson	WS7L	629-5796
Health & Welfare	OPEN		
Member Badges	Terry Sparks	AA7ZO	628-0372
Newsletter Editor	Bill Merwin	N7VZF	640-8873
Newsletter Layout	Bill Merwin	N7VZF	883-8504
Newsletter Distribution	Al Berg	WB7SIC	640-5456
Nomination of Officers	Van Van Ness	KE7BB	246-7975
Project Night	OPEN		
Public Relations	Bill Merwin	N7VZF	644-1974
Public Service	Randy Stimson	KZ7T	297-1175
Repeater	Wes Allen	K7WWG	649-3295
RFI & TVI	Dale Mosby	N7PEX	640-0217
Satellites	Dick Emmel	W7KJZ	245-1928
Scholarship	Exec. Board	N7VZF	644-1974
Sea-Pac	Al Berg	WB7SIC	640-5456
	Brad Beach	N7NVC	657-1781
	Jim Schaeffer	KB7ADH	245-2518
	Randy Stimpson	KZ7T	297-1175
Technical	OPEN		
Tower Ordinances	Stan Griffiths	W7NI	649-0837
Trailer	Dee Lynch	KA7NPN	646-4580
Training(Code)	Burt Rooke	KI7JX	241-2891
Training(Novice/Tech)	Burt Rooke	KI7JX	241-2891
Training(Upgrade)	OPEN		
VE Testing	Alan Roehl	KO7B	292-5243
VE Test Schedule	OPEN		
VHF/UHF	Bill Roth	N7RYW	297-7605

For Sale - 50' Tower

I received a call from the father of a ham in Amity. He has a 50' "Self Standing" Rohn tower with rotor. I don't know which model of Rohn it is but it was described as Free Standing. The Price is \$350. You can contact the owner - David Talbot - N7JXP at:

835-8900 (Home)
931-7663 (Cell)
370-1010 (Pager)
for more information.

OTVARC Club Information

Purpose: The Oregon Tualatin Valley Amateur Radio Club, a Not-for-profit corporation, wants to be instrumental in helping the prospective as well as established Amateur to become a proficient communicator in the Amateur Radio Service.

Additionally, the intent is to promote the advancement of Amateur Radio Service through the following five objectives:

1. Education & Training of new and licensed Amateurs.
2. Public Service during public events & community activities.
3. Emergency communications during emergencies & disasters.
4. Hobby enhancement through meetings, nets & contests.
5. Social contact with other amateurs & interested persons.

Special Service Club OTVARC is an ARRL Special Service Club. The ARRL grants us this distinction due to our participation in emergency preparedness exercises, public service events and other service-oriented programs. In addition, continuing educational and training programs are conducted for FCC licenses. OTVARC benefits from you joining the ARRL through OTVARC. To join or renew your membership in the ARRL, contact the treasurer at any regular meeting.

Newsletter: The *OTVARC Oscillator* is the club newsletter. It is published monthly and is usually mailed on the first of the month. The opinions, views and recommendations of its contributors are not necessarily those of the Club, its officers, advertisers or the editorial staff.

Correspondence: All correspondence may be sent to OTVARC, PO Box 5132, Aloha, OR 97006-0132.

Advertising: Classified ads are free to all paid up members. Display ads are available to approved commercial interests. To place an ad, mail your camera ready copy to the address above and indicate the size desired. All display ads run for six months at a time from January through June and July through December. All ads must be paid for in advance. Rates for 1994 are as follows:

Full Page	8" X 10"	\$200 for 6 mo.
Half Page	8" X 5"	\$125 for 6 mo.
Qtr Page	4" X 5"	\$75 for 6 mo.
Bus. Card	2" X 3"	\$35 for 6 mo.

Meetings: We have two meetings per month. The board meeting is on the first Wednesday of each month. All club business is conducted at this meeting. All members are welcome to attend. Contact the President for location and time. The general meeting is on the second Wednesday of each month at the Beaverton Elks Club, 3500 SW 104th Ave. (1 block north of Canyon Road). Meetings start at 7PM. If you would like to come early, you can get a nice meal from the Elks for less than \$6.

Membership OTVARC is open to anyone who is interested in amateur radio. You do not need to be a licensed radio amateur to join. Dues are as follows: Full member, \$10/yr; Associate member (non-licensed), \$10/yr; Family members of full member, \$5/yr; Life memberships available - see Treasurer. Only full members and life members may vote on club business and serve as club officers. All memberships expire on the last day of the calendar year. If you would like to join during the year, see the club Treasurer for prorated dues.

How To Join: Simply mail the Member Application and Renewal Form along with your dues to the address above.

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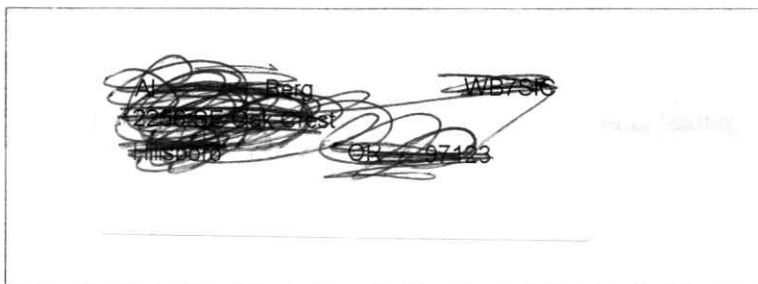
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Post Office Box 5132
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Address Correction Requested



Inside this Issue
Field Day Update
Public Service Event Info
Intro to Packet Radio
Radio Active Schools
Volunteer Opportunities
Much More.....



FIRST CLASS MAIL

OTVARC Oscillator